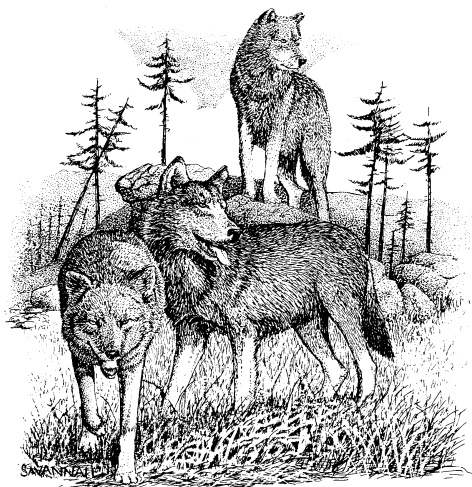




## Wolf Recovery in the Western Great Lakes States

*The wolf has made a remarkable comeback in Minnesota, Wisconsin, and Michigan.*



All of Minnesota, Wisconsin, and Michigan, (as well as adjacent states) were once home to wolves. During European exploration and early settlement (1634-1830), wolves preyed on bison, elk and white-tailed deer in the south, and moose, deer, caribou and beaver in the north.

Killing by humans, loss of habitat, and loss of prey (bison, elk, deer, moose, caribou, and beaver) caused wolf declines early on. Even by 1838, wolves were eliminated from the southern portion of the lower peninsula of Michigan.

Bounties began during the 1800s and by the early 1900s wolves were gone from the southern parts of Minnesota, Michigan, and Wisconsin. Elimination from all of Wisconsin, Michigan (except Isle Royale), and most of Minnesota was completed by 1960.

Even though state law in Wisconsin and Michigan protected wolves prior to 1973, the year the Endangered Species Act was passed, those State provisions took effect too late. By the time Wisconsin gave the wolf protection in 1957, the species had been extirpated from the State. Michigan followed suit in 1965, with endangered species protection for the wolf. At that time only a few lone wolves remained in the Upper Peninsula and an isolated population existed on Isle Royale.

In Minnesota, a bounty on wolves, and all predators, continued until 1965. Between 1965 and 1974, Minnesota had an open season on wolves and the State conducted a Directed Predator Control Program. With the control program and other kills, about 250 wolves were taken in Minnesota each year. During this time, the wolf population was estimated at 450 to 700 animals. The State's control program and open season continued until May 1974, when the gray wolf gained protection under the Endangered Species Act.

### Wolf Recovery

Legal protection against killing or harming wolves, provided by the Endangered Species Act, was perhaps the most important factor that led to wolf recovery in the Midwest. Also, as a result of listing the wolf as endangered, a Recovery Plan was prepared. The goal of the plan was to identify conservation actions needed to establish a viable wolf population that would no longer need Endangered Species Act protection. The Recovery Plan focused time, money, and energy on the most important conservation actions.

Along with protection from uncontrolled killing and implementation of the Recovery Plan, wolves also rebounded because their primary prey, white-tailed deer, were doing well. White-tailed deer herds in Minnesota, Wisconsin, and Michigan increased through the 1980s and early 1990s because of mild winters and timber harvests that created prime habitat.

The Recovery Plan established recovery criteria for the wolf. The criteria include: the survival of the wolf in Minnesota is assured, and 100 or more wolves in Wisconsin/Michigan

for a minimum of five consecutive years. The Minnesota wolf population has been at or above 1,250 to 1,400, the minimum for Minnesota in the Recovery Plan, since the late 1970s. And, based on winter census figures, it appears the Wisconsin/Michigan wolf population has been above 100 for six consecutive years. Given these developments, wolves in the western Great Lakes states now stand at the brink of recovery.

**Minnesota:** (*Information in this section is primarily from William Berg, biologist for the Minnesota DNR*) During the mid- to late 1970s, Minnesota estimated the wolf population at about 1,000 to 1,200 animals. Then during the 1980s, researchers documented areas that wolves had recently colonized, which suggested that the numbers and range were increasing. Therefore, the Minnesota DNR conducted a 1988-89 winter survey that resulted in an estimate of 1,500 to 1,750 wolves.

Currently, the DNR estimates that 2,445 wolves live in Minnesota. These numbers are based on a comprehensive 1997-98 survey conducted by the Minnesota DNR and cooperators.

Over the 25 years since receiving Endangered Species Act protection, the wolf in Minnesota increased its range in the northcentral and central parts of the State. This successful range expansion was due to protections from uncontrolled killing, high deer numbers, and dispersal of individuals from existing packs. Telemetry studies documented recolonization by wolves dispersing to new areas from the major wolf range in northeastern Minnesota. Those studies also documented wolves dispersing from the very few scattered packs in northcentral

Minnesota that somehow were able to survive the "bounty era."

Today, wolves are surviving in areas with higher road and human densities than previously believed to be suitable for wolf survival. Dispersal continues to areas in west-central parts of the State, east-central Minnesota just north of Minneapolis/St. Paul, North and South Dakota, and Wisconsin.

A wolf management plan for Minnesota has not been approved. After extensive input from the public and interested organizations, the Minnesota DNR drafted a wolf management plan in 1999, but it failed to win the support of the State Legislature. In May of 2000, the Legislature passed a set of regulations that describe the State protections that would begin after the wolf is delisted. The new regulations are not a management plan, but they do direct the Minnesota DNR to prepare a wolf management plan.

**Wisconsin:** *(Information in this section is from Adrian P. Wydeven, biologist for the Wisconsin DNR)* From 1960 to 1975 there were no breeding wolves in Wisconsin. But soon after the wolf was listed as federally endangered, wolves began re-establishing themselves in Wisconsin, apparently dispersing from adjacent Minnesota. The Wisconsin DNR began monitoring wolves in 1979 using trapping and radio-collaring, winter track surveys and summer howling surveys.

When the DNR began monitoring wolves, they documented 25 in the State. During the mid-1980s wolf numbers in Wisconsin reached a low of only 15 animals, probably due to an epidemic of canine parvovirus which apparently killed many wolf pups. Wild wolves seemed to develop some degree of natural resistance and numbers increased after 1985.

Since that time, numbers have been steadily increasing. Wolf population estimates (late winter counts) for 1995 through 1999 are 83, 99, 148, 180, and 197 animals comprising 18, 28, 35, 47, and 54 packs, respectively. Current estimates put the total at 248 wolves.

Parvovirus seems to be declining, but is still present in Wisconsin wolves. Lyme disease and mange are also present in this population. The impact of these diseases, particularly on pup survival, is not well known. Wisconsin wolf researchers are continuing their study of wolf movements in the Wisconsin-Minnesota border area, as well as the wolf range expansion southward into the central portion of the state. Wisconsin DNR had 20 packs being tracked by radio collars at the end of the 1998-99 winter.

The Wisconsin DNR held public meetings during 1996 to get public input into development of a new State wolf management plan. After going through several public drafts, a final plan was approved by the Wisconsin Natural Resources Board in October of 1999. That plan sets a management goal of 350 wolves in the State (outside of Indian Reservations).

**Michigan:** *(information in this section is from James H. Hammill, biologist for the Michigan DNR)* When wolves began getting a foothold in Wisconsin during the late 1970s, biologists started documenting ever-increasing numbers of single wolves in the Upper Peninsula of Michigan. Finally, in the late 1980s they documented a pair of wolves traveling together in the central Upper Peninsula. This pair had pups for the first time in the spring of 1991. The next year (summer of 1992), Wisconsin and Michigan DNR biologists radio-collared one of the wolves in the only known pack. By the end of 1992, Michigan biologists verified at least 20 wolves in the Upper Peninsula. Since then, numbers have steadily increased, except for 1996.

The end of the 1996-97 winter count found the number of wolves at 112, down from the 116 documented during the previous late winter count. That decline appears to have been due to two consecutive harsh winters and a high incidence of mange. In some areas of the Upper Peninsula of Michigan, deer numbers were reduced by 80 percent due to record snow falls and low temperatures during the 1995-96 winter. This provided more

prey for wolves during that winter but was followed by another severe winter with unusually deep snow in 1996-97. During that second winter there were few deer for wolves to prey upon and wolf deaths were high.

Since then, the Michigan Department of Natural Resources completed two additional Upper Peninsula late winter wolf surveys. Trackers estimate that there were at least 174 wolves in 1998-99 and 216 in 1999-2000 in late winter. Thus, numbers have rebounded from the previous years' decline. Radio-collaring and monitoring Michigan's wolf population continues.

Michigan, through the DNR, established a Michigan wolf recovery team that completed a Wolf Recovery and Management Plan in December 1997. The Michigan plan recommends managing for a minimum of 200 wolves on the Upper Peninsula.

In addition to wolves on the Upper Peninsula, there have been wolves residing on Isle Royale, Michigan, near the Minnesota-Ontario shore of Lake Superior, since the winter of 1948-49. Their population has moved up and down with that of their prime prey species-moose. Following a peak of 50 wolves in 1979, the population plummeted to the low teens in the late 1980s and early 1990s. However, they appear to be rebounding, and 29 wolves in three packs were documented at the end of the winter of 1999-2000. Due to their low numbers and near total isolation from other wolves in the western Great Lakes States, these wolves are not considered to be contributing to meeting the Federal recovery goals for gray wolves.

*For more information see the U.S. Fish and Wildlife Service's Region 3 Website at <http://midwest.fws.gov/wolf> or call the Wolf Line at (612)713-7337. Also, see the International Wolf Center's website at <http://www.wolf.org>*